

# Regional Academic Bowl – Round 2

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## First Quarter

(1) Jean-Baptiste Arban created a *Complete Conservatory Method* for this instrument, which was the subject of an E-flat major concerto by Joseph Haydn. Though not the flute, the piccolo variety of this instrument possesses its highest register, pitched one octave above its standard B-flat variety. For ten points, name this brass instrument that is similar to the cornet, commonly used in jazz ensembles and military marches.

ANSWER: trumpet

(2) Alexander Young Malcomson raised \$3000 for a venture overseen by this man, and one of this man's descendants through his son Edsel is the owner of the Lions NFL franchise. The River Rouge Complex was established by this man, who designed such objects as the Model T. For ten points, name this American automobile entrepreneur who names a company that sells cars like the Mustang and Focus.

ANSWER: Henry Ford

(3) This theory uses terms for boundaries, such as convergent, where subduction occurs. Evidence for this theory includes confirmed seafloor spread and observations dating back to 1596, which state that continental shelves seem to fit together like puzzle pieces. For ten points, name this theory that describes how landmasses such as Pangaea and other large sections of Earth's lithosphere experience "continental drift."

ANSWER: plate tectonics (accept continental drift before read)

(4) This facility is served by a metro station near the Rue de Rivoli, and a major focal point of this locale designed by I. M. Pei lies at the center of the Cour Napoléon. This facility bounds the Tuileries Garden with the Place de la Concorde. This museum, the largest and most-visited art museum in the world, is notable for its glass pyramid. For ten points, name this museum in Paris known for housing the *Mona Lisa*.

ANSWER: The Louvre

(5) Certain tenants of this location lived on a 1,000-foot thoroughfare known as Mulberry Row. Andrea Palladio's architectural elements inspired the neoclassical design of this location, which is depicted on the reverse of the nickel. Originally 5,000 acres, this plantation can be found near Charlottesville. For ten points, name this plantation on which Thomas Jefferson lived.

ANSWER: Monticello

(6) These animals name a family which also includes the gharials and caimans, and a 2006 study supported a hypothesis that they emit tears while eating their prey. Southern Florida is the only place in the United States where this animal's "American" species exists, and its Nile and saltwater species are the two heaviest reptiles in the world. For ten points, name these semiaquatic animals known for their powerful jaws, closely related to alligators.

ANSWER: true crocodiles (or Crocodylidae)

(7) Harold Keith's children's novel *Rifles for Watie* is set during this conflict. A flag-bearer named Henry Fleming seeks to make up for his cowardice during this war in Stephen Crane's *Red Badge of Courage*. Joshua Chamberlain and Jeb Stuart appear in a Michael Shaara novel set during a Pennsylvania battle in this war. For ten points, name this war which inspired various novels about the Battle of Gettysburg.

ANSWER: American Civil War

(8) For 39 years, Homer Thompson excavated a site in this city, where a synagogue was supposedly located. An ancient temple called the Metroon was located in this city, which is also the site of the "Areopagus" where the Apostle Paul gave a sermon. For ten points, name this Greek city, where the Temple of Athena Nike [[NEE-kay]] and the Parthenon were built on the Acropolis.

ANSWER: Athens (or Athína; or Athênai)

## Second Quarter

(1) One composer from this country inspired the musical *Kismet* and studied organic synthesis as a chemist. Viktor Hartmann was friends with a composer from this country who wrote *Pictures at an Exhibition*, and another composer from this country used an "Invasion Theme" to depict an 872-day siege. For ten points, name this country, the subject of Dmitri Shostakovich's *Leningrad Symphony*.

ANSWER: **Russia** (or **Rossiya**; or **Russian** Federation; or **Rossiyskoy Federatsii**; accept **Russian** Empire or similar answers; accept **Soviet Union**, **USSR**, or similar answers)

BONUS: This was the number of members of a namesake "Mighty" group of composers who took inspiration from history and folklore to forge a nationalist identity within Russian music.

ANSWER: **five** (accept Mighty **Five**; accept Russian **Five**; accept Mighty **Handful**)

(2) Drugs used to treat this condition usually include the combination of beta-2-agonists together with steroids and anticholinergics. In this condition, the airways become overly sensitive to irritants and allergens. This respiratory condition is characterized by recurrent episodes of wheezing, breathlessness, chest tightness, and coughing. For ten points, name this chronic inflammatory condition of the airways of the lungs.

ANSWER: **asthma**

BONUS: It isn't asthma, but the "acute" form of this respiratory infection is known as a chest cold. Unlike asthma, this condition named after the airways of the lungs can be caused by bacterial and viral infections.

ANSWER: **bronchitis** (accept acute **bronchitis**)

(3) A quip about this body that lauded "the switch in time that saved nine" concerned its decision to support minimum wage legislation. Benjamin N. Cardozo and Harlan F. Stone served on this body when it was headed by Charles Evans Hughes, and Franklin Delano Roosevelt proposed the "packing" of this body to stop its rejection of New Deal legislation. For ten points, name this highest judicial body in the United States.

ANSWER: U.S. **Supreme Court**

BONUS: Also present on the Supreme Court during the New Deal period was this first Jewish justice, who names a university in Massachusetts.

ANSWER: Louis **Brandeis** (or Louis Dembitz **Brandeis**)

(4) In 2017, Tony Award winning actor Christian Borle played this character while singing "It Must Be Believed to Be Seen" and "Strike That! Reverse It!" in the Broadway musical version of a 1971 film. At the 2006 White House Children's Holiday Reception, this character, known for wearing a top hat, performed the song "Pure Imagination." For ten points, name this Roald Dahl character who owns a chocolate factory.

ANSWER: Willy Wonka

BONUS: The 2013 musical adaptation of *Charlie and the Chocolate Factory* opened at the Drury Lane theatre in London's West End, which is generally considered the English equivalent to what major New York City theater district?

ANSWER: Broadway

(5) Surface tension can increase the effect of this force by increasing the amount of displaced matter, which then exerts a proportional amount of this force according to Archimedes' principle. Objects with low densities can experience this upward force generated by fluids. For ten points, name this force which cause objects to float.

ANSWER: buoyancy (accept upthrust before "upward" is read)

BONUS: Archimedes developed his namesake principle, as well as a namesake spiral, and water screw while living in this ancient city. He also created allegedly a claw and heat ray to defend this Sicilian city from a Roman invasion.

ANSWER: Syracuse (or Siracusa; or Saragusa; or Syrakousai)

(6) The Greek pagan philosopher Celsus claimed that this figure was the son of a great Roman soldier named Panthera. The forged *Testimonium Flavianum* from the *Antiquities of the Jews* describes this figure, whom Tacitus records being executed by Pontius Pilate. Josephus recorded the crucifixion of, for ten points, what Jewish apocalyptic prophet who is honored as the founder of Christianity?

ANSWER: Jesus Christ (accept either underlined part; or Jesus of Nazareth; accept Iêsous; or Yeshua)

BONUS: The adopted father of Jesus was this Jewish man from Nazareth who worked as a carpenter.

ANSWER: Joseph (or Yosef; or Ioseph)

(7) The number of carbon-consuming bacteria in this resource can be determined using the heterotrophic plate count test. Iodine tablets can be used to prepare this resource and are commonly marketed to backpackers. Flocculation and chlorination are used to treat this resource, which is the primary vector for cholera when contaminated with feces. For ten points, name this resource that is purified from springs and wells.

ANSWER: drinking water

BONUS: The addition of this anion to drinking water to prevent tooth decay has been controversial in the United States, and is opposed by figures such as Robert F. Kennedy Jr.

ANSWER: fluoride (do NOT accept "fluorine")

(8) A film from this studio earned two Oscars for Robert and Richard Sherman. Howard Ashman and Alan Menken won the Best Original Song Oscar for their work with this studio, which also commissioned soundtracks from musicians such as Billy Joel and Phil Collins. For ten points, name this studio that created the classical concert film *Fantasia* and won an Oscar for the song "When You Wish Upon a Star."

ANSWER: Walt **Disney** Studios

BONUS: Disney and Alan Menken's dominant run in the Best Original Song category began with this 1989 animated film, for which Menken wrote "Poor Unfortunate Souls" and "Part of Your World."

ANSWER: *The **Little Mermaid***

### Third Quarter

The categories are:

1. History of Sculpture
2. Chinese Dynasties
3. Fields of Mathematics

*History of Sculpture*

Concerning the history of sculpture, name the...

- (1) Love goddess "of Milo" depicted in a marble sculpture missing both her arms.

ANSWER: **Venus** de Milo (or **Aphrodite** of Melos)

- (2) Mythical creature who is part human, part lion, and part eagle, the subject of an ancient Egyptian sculpture.

ANSWER: **Sphinx**

- (3) Clay-based material that names an army of sculptures depicting Qin Shi Huang's army.

ANSWER: **terracotta**

- (4) Queen of ancient Egypt and wife of Akhenaten whose limestone bust was found at Amarna.

ANSWER: **Nefertiti**

- (5) Marble monument discovered on the island of Samothrace depicting a goddess whose head and arms are missing.

ANSWER: **Winged Victory** of Samothrace (or the **Nike** of Samothrace)

- (6) Ancient Greek sculptor who created the Statue of Zeus at Olympia, one of the Seven Wonders of the Ancient World.

ANSWER: **Phidias** (or **Pheidias**)

*Chinese Dynasties*

Concerning Chinese dynasties, name the...

- (1) Dynasty in which the Qing [[CHING]] Dynasty ending shortly before the start of World War One.

ANSWER: **20**th century (or **1900**s)

- (2) Modern Chinese capital founded as Jicheng and briefly known as Dadu.

ANSWER: **Beijing**

- (3) Dynasty that succeeded the Qin [[CHIN]] and shares its name with China's main ethnic group.

ANSWER: **Han** dynasty

- (4) First archaeologically supported Chinese dynasty that pioneered using oracle bones.

ANSWER: **Shang** dynasty

- (5) Chinese Muslim explorer who undertook "treasure voyages" during the Ming Dynasty.

ANSWER: **Zheng** He [[JUNG HUH]] (or **Ma** He)

- (6) Short-lived Chinese dynasty during which Wen Di led construction efforts on the Grand Canal.

ANSWER: **Sui** [[SWEH]] dynasty

*Fields of Mathematics*

Considering fields of math, name the...

- (1) Branch of math that uses abstract symbols instead of numbers, such as x, y, and z.

ANSWER: **algebra**

- (2) Branch concerned with the angles and side lengths of triangles, whose functions include sine and cosine.

ANSWER: **trigonometry**

- (3) Field studying continuous change, whose operations include differentiation and integration.

ANSWER: **calculus**

- (4) Mathematical collections of things studied in a "theory" developed by Georg Cantor.

ANSWER: **sets**

- (5) Branch studying the properties of geometric objects that are preserved through deformations like twisting or stretching.

ANSWER: **topology**

- (6) German namesake of a field of geometry whose namesake "sums" can be used for approximating definite integrals.

ANSWER: Bernhard **Riemann** (or Georg Friedrich Bernhard **Riemann**)



### Fourth Quarter

(1) A civil engineer with the surname Hall oversaw the installation of this project, providing its nickname. This object's timekeeping is adjusted by adding or removing old penny coins from its pendulum. Housed in the formerly named (+) St. Stephen's Tower, this object survived the Blitz but remained silent during World War Two except for New Year's Eve. (\*) For ten points, name this iconic bell and clock at the Palace of Westminster in London.

ANSWER: **Big Ben** (prompt on "Elizabeth Tower")

(2) Ophiuchus [[OH-fee-UH-kuss]] was the site of a 1604 event of this type named for Johannes Kepler. Type (+) Ia [["One A"]] examples of these phenomena occur in binary systems and involve a white dwarf. A progenitor can either collapse or be destroyed to form a diffuse nebula in this process. Occurring in the (\*) final stages of stellar evolution, this is, for ten points, what process in which a star explodes?

ANSWER: **supernovae** (accept **supernovas**)

(3) While hitchhiking near Sallisaw after being paroled, one character in this book meets a preacher named Jim Casy. John Ford directed a film adaptation of this novel, which was published in 1939. While traveling on (+) Route 66 during this novel, stories of individuals returning from California are told to the Joad family. (\*) For ten points, name this novel written by John Steinbeck about Okies escaping the Dust Bowl.

ANSWER: *The **Grapes of Wrath***

(4) One event of this type partly led by Henry the Lion was named for the Wends. The sack of Constantinople occurred during the fourth campaign of this type, one of which was called by (+) Pope Urban the Second. Frederick Barbarossa and Richard the First of England were among the leaders of an event of this type. (\*) For ten points, name these religious wars launched by European Christian armies.

ANSWER: **Crusades** (accept Wendish **Crusade**; accept First **Crusade**; accept Third **Crusade**)

(5) The gene WDC1 is best known for being associated with accumulations of this tissue, which can increase the risk of heart disease. When this tissue contains a high number of mitochondria it has a (+) dark appearance and is known as its "brown" form. This tissue serves as a body store of lipids and is used as the body's primary long-term energy store. (\*) For ten points, name this type of tissue that accumulates in people with obesity.

ANSWER: **fat** (or **adipose** tissue)

(6) **In a film whose title contains the name of this animal, a bus driver is killed when the Hollywood sign lands on him. In another film whose title character is one of these animals, Jack Morris finances Mana One. (+)** where a large scientist known only as “The Wall” works. A film with these animals in the title had sequels including *Oh Hell No!* and *It's About Time*. (\*) For ten points, name these animals which are the main antagonists of *The Meg* and a series of Syfy Channel movies in which they are picked up by tornadoes.

ANSWER: **sharks** (prompt on “megalodon”)

(7) **One member of this profession, Wayland, got revenge on a king by turning his sons’ bodies into cups and jewels. In Norse mythology, (+)** dwarves such as the Sons of Ivaldi are masters of this profession. Many gods of this profession were believed to work underneath (\*) volcanoes, causing their eruptions. For ten points, name this profession of gods like Vulcan and Hephaestus, who work at forges.

ANSWER: black**smith** (accept **metalworking**)

(8) **This kind of organism can arise when the nucleus of a somatic cell is transferred into an enucleated egg cell, further implanted into a surrogate mother. The first mammalian type of this organism made from an adult somatic cell was (+)** Dolly the sheep. This type of organism can occur naturally when the fertilized egg splits into two giving (\*) identical twins. For ten points, name this type of organism that is genetically identical to another organism.

ANSWER: **clone** (accept **cloning**)

### Extra Question

(1) **This term indicates the part of the muscle that attaches to a fixed bone. This term is used to identify the highest point of the femur, which makes up the (+)** ball portion of the hip joint. In mechanics, this term applies to the top surface of a piston, and, in an aggregate of liquid molecules, this term is contrasted with (\*) tails. For ten points, name this term, which also applies to the body part that is attached to the torso by the neck.

ANSWER: **head**

BONUS: "A single man in possession of a good fortune" is mentioned in the opening line of this Jane Austen novel in which Elizabeth Bennett encounters Mr. Fitzwilliam Darcy.

ANSWER: **Pride and Prejudice**